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ROUND 2

COVID-19 MED POLICY BRIEFS

**COVID-19
IMPLICATIONS IN THE
MEDITERRANEAN**

**COVID-related financial challenges for
South-Med universities: The way forward**

Med Brief No22 - November 2021



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COVID-19 IMPLICATIONS IN THE MEDITERRANEAN



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Keywords: COVID-19, Higher Education, Universities, Financing, Alliance, Policy Tracker.

Executive Summary

This brief focuses on the impact the Coronavirus pandemic has had on the financial support to universities and higher education institutions in selected South-Med countries (Tunisia, Algeria and Morocco).

It outlines the financial impact on the ground, proposes recommendations and practical solutions to face the shortage of funding and lays the foundations for a more sustainable higher education funding landscape.

Recommendations highlight the need to go towards a cost-effective business model. Universities should adopt cost-effective blended modes of teaching and learning, and include risk management in their strategic planning. Meanwhile, funding-allocation mechanisms that are directly linked to the overall performance of universities should be developed.

To better face the COVID-19 impact, a series of initiatives can also be considered including setting-up a South-Med countries COVID-19 higher education policy tracker and creating a South-Med countries universities' alliance.

1. Introduction

The coronavirus (COVID-19) pandemic has significantly disrupted and negatively impacted every aspect of human life and has to a large extent had an impact on the economies of every country, independently of development levels. On top of the health crisis, the COVID-19 pandemic has had devastating economic and social effects as it has plunged the global economy into a deep recession, which some scholars qualify as worse than the 2008 global financial crisisⁱ and the Great depression of the 1930's. All domestically generated funds went towards responding to this crisis (providing health services) and towards re-stabilizing economies. Consequently, the ability of governments, especially in low-income countries, to support the education sector has been further depleted, including in higher education.

This COVID-specific impact was outlined by UNESCOⁱⁱ which stated that "public higher education institutions (HEIs) will reopen in an already full blown economic recession and major cuts in public investment in education are expected, such as those experienced during the 2008 financial crisis. In the case of private HEIs, it is possible to anticipate crises that will lead to definitive closures". The views of the UNESCO report are also in line with the COVID-19 policy trackerⁱⁱⁱ, launched by the International Monetary Fund, which monitors how South-Med countries, among others, are re-directing capital spending towards mitigating the socio-economic impact of the pandemic and to meet the health sector's requirements.

As a result, government grants to universities in South-Med countries are expected to continuously decline due to the need to address new priorities, such as the revival of economic activities and providing support for basic social services. This will hit South-Med universities hard and will require from governments to urgently design and implement a sustainable financing strategy to support their higher education systems. This financial challenge will add to the already existing challenges that these universities are facing and which have been revealed through the pandemic, in particular in relation to digitalization of teaching and learning, open science, research, quality assurance, funding and community engagement.

This policy brief presents the financial difficulties facing universities in selected South-Med countries including Tunisia, Algeria and Morocco. It also presents a strategic roadmap, to turn financial hardship into opportunities for funding gains, through a broadening of sources of revenue away from traditional ones.

2. Mediterranean context: unproductive allocation of funding that impacts performance

- **The current funding model for Higher education**

Funding for public universities in the South-Med, especially in the North African countries (Egypt, Libya, Tunisia, Morocco and Algeria), mainly depends on public financing from

governments which represents about 90% of all funding according to *UNESCO*^{iv}. The remaining 10% is mostly covered through student fees and educational services, such as open and parallel education programmes, as well as through private sector contributions along with external foreign assistance as indicated by Alkubaisi and Rasool^v.

Over the years, faced with a growing student population, many governments in the South-Med region have responded with increased support to tertiary education, according to CMI (2020)^{vi}. Indeed, per capita spending in relative terms tends to be higher than in industrialized countries. Even countries facing financial constraints, such as Morocco or Tunisia, tend to spend in relative terms more than OECD countries. This is evident when looking at government expenditure on tertiary education per student, as the percentage of per capita GDP reaches 40%, 81% and 51% in Algeria, Morocco and Tunisia respectively (versus 34% for OECD countries).

However, despite the resources invested and a rising demand, education systems in most South-Med countries have fallen short of their promise to provide the needed quality that would ensure social and economic inclusion. This is evidenced by the results of the PISA (Programme for International Student Assessment) and TIMSS (Trends in International Mathematics and Science Study) tests which paint an extremely worrying picture in the basic skills of young South-Med students. For example, the 2019 PISA results^{vii} indicated that Morocco ranked 73th, placing the country in the bottom one-third among the 79 participating countries.

This could be explained by the fact that, in public universities about 80% to 90% of the total budget is spent on teacher and staff salaries, and thus there is little else left for investments in the learning environments or infrastructure development, in further education, in research, in student services, or for any other outreach activities, according to UNESCO (2018). To that effect, none of the North African universities are included in top-100 university rankings.

There is however some glimmer of hope, as several South-Med countries have launched strategies for reforming the higher education sector, namely, **Tunisia**, **Morocco** and **Algeria**. **Tunisia's** 10-year reform initiative for higher education and research focuses on improving the quality of university education and the employability of graduates, establishing good governance, greater autonomy of universities and improving resources management^{viii}. Besides focusing on consolidating the pedagogical training of academics and promoting research and innovation, the reform is also aimed at revising the university map across Tunisia and to improve educational conditions.

As for **Morocco**, in 2019, the government approved a “virtual universities plan” which will effectively convert the country’s traditional universities to dual-mode universities offering distance learning programmes alongside on-campus teaching, in a bid to enhance university access and reduce overcrowding^{ix}.

Furthermore, the **Algerian** Ministry of Higher Education and Scientific Research is concentrating on extending existing technological networks and higher learning institutions

in order to meet rising demand, including by opening-up the tertiary sector to private and foreign investors (Oxford Business Group^x).

- **Countries performance on the global knowledge map**

The Global Knowledge Index (GKI) provides a quantitative diagnosis of the state of knowledge performance worldwide including indicators such as: pre-university education, technical and vocational education and training, higher education, research, development and innovation, information and communications technology, and economy. Below is a summary for performance for some South-Med countries as indicated in Global Knowledge Index 2020^{xi}.

- **Algeria** is a modest performer in terms of its knowledge infrastructure as it ranks 103rd out of 138 countries in the GKI 2020 and 34th out of the 36 countries with high human development. It ranks 42nd and 78th globally with reference to higher education as well as research development and innovation respectively. Areas of strength in higher education include the percentage of researchers in higher education. Areas of improvement include the percentage of researchers in business enterprise.
- **Morocco** is a moderate performer in terms of its knowledge infrastructure as it ranks 83rd out of 138 countries in the GKI 2020 and 3rd out of the 24 countries with medium human development. It ranks 85th and 82nd globally with reference to higher education as well as research development and innovation respectively. Areas of strength in higher education include the percentage of researchers in higher education. Areas of improvement include Pupil-teacher ratio, tertiary and unemployment with advanced education (%)
- Lastly, **Tunisia** is a moderate performer in terms of its knowledge infrastructure as it ranks 82nd out of 138 countries in the GKI 2020 and 24th out of the 36 countries with high human development. It ranks 56th and 72nd globally with reference to higher education as well as research development and innovation respectively. Areas of strength in higher education include government expenditure, tertiary (% of GDP) and the percentage of enrolment in tertiary education. Areas of improvement include the percentage of unemployment with advanced education.

3. Pandemic impact on the funding of universities

Despite additional funding needs, two-thirds of low- and lower-middle-income countries, such as those of the South-Med region have cut their public education budgets since the start of the pandemic. In comparison, only one-third of upper-middle and high-income countries have reduced their budgets, according to World Bank & UNESCO (2021)^{xii}. In this section, we present the economic implications of Covid-19 on public finances for higher education and on the financing of universities, which start to emerge in the South-Med :

- **Morocco**

In Morocco, the Ordinary Finance Act 2020 allocated to the Ministry of National Education, Vocational Training, Higher Education and Scientific Research credits of 49.35 billion dirhams (US\$5.3 billion) for employees, and 15.95 billion dirhams for equipment and

expenses. However, the amended Finance Law^{xiii}, approved by the government on July 8th and published on July 27th 2020 in the official bulletin, lowers employee expenditure at 47.48 billion dirhams, and sets 14.55 billion dirhams for various equipment and expenses – a total reduction of approximately 3 billion dirhams.

According to a decision^{xiv} by Morocco's minister of higher education, published in an official bulletin on June 18th, private higher education institutions will not be eligible to benefit from the draft law^{xv} which provides a legal framework to the measures implemented by the Economic Monitoring Committee to support businesses and employees in the formal sector amid the COVID-19 crisis. As a result, the academic staff union, the National Syndicate for Higher Education and Scientific Research (SNESUP^{xvi}) has denounced the education sector budget cuts to address the repercussions of the coronavirus crisis. Meanwhile, several universities' executives have voluntarily taken salary cuts contributing to the COVID-19 solidarity fund. For example, the 22 heads of Morocco's public and private universities^{xvii} donated one month's salary and Morocco's National Syndicate for Higher Education and Scientific Research (SNESUP) decided to donate three days worth of wages for a period of three months^{xviii}.

- **Tunisia**

According to a Tunisia/UNDP study^{xix} on the impact of COVID-19 on the Tunisian economy, the unemployment rate in Tunisia was initially expected to increase to 21.6% by the end of 2020 up from 15%, and the poverty rate was forecasted to rise to 19.2% from 15.2%. Meanwhile, the economy was expected to shrink by up to 4.3% in 2020, the steepest drop since independence in 1956^{xx}. As a result, the Tunisian Ministry of Higher Education and Scientific Research had postponed university staff promotions and cancelled additional hours allowances as indicated in the 27 April 2020 ministry statement^{xxi}.

In response, the Union of Tunisian University Teachers and Researchers (IJABA, meaning 'answer' in Arabic) issued a statement^{xxii} in which it rejected the proposed austerity measures and called for greater financial support to link university research with industry.

- **Algeria**

Due to the Covid-19 crisis, the Algerian Minister of Higher Education and Scientific Research^{xxiii} had called to rationalize expenditures to reduce the allocations for the running expenses to reach 30 percent by the end of the fiscal year 2020. Also, on May 3rd 2020 the Council of Algerian Ministers meeting had decided to reduce the State's operating budget from 30% to 50%^{xxiv}.

The coronavirus pandemic, among other factors including a liquidity crisis and inflation, has brought many Algerian economic sectors to a standstill. This was very clear in the 2021 budget^{xxv} which foresaw a deficit of around 14 percent of GDP (around US\$ 20.4 billion, 17.6 billion euros). Africa's third biggest oil producer has also faced negative growth, with the International Monetary Fund forecasting that its economy would shrink by 5.2 percent this year and that it will have one of the region's highest budget deficits.

4. Double COVID-19 impact: Reduced funding & low education quality

The pandemic-induced recession is already being felt at the household level in the region, which means that even overall private expenditures on higher education have been reduced, according to a recent World Bank study^{xxvi}. For example, in Morocco, 60 percent of households indicated a decline in living standards and over one third had to take on debts to weather the crisis. Many students and their families may soon be unable to pay tuition fees. The loss of tuition and other income is likely to affect quality of educational programmes in private universities to a greater extent than public universities. The study indicated that university budget cuts will soon result in staff freezes and early retirement to cut operating costs, further reducing the already stretched Student-Teaching Staff ratios, and overall affecting quality. Non-permanent teaching staff and research staff on precarious contracts are the most vulnerable and may be terminated more easily. The large-scale disruptions due to the shutdown may impede student learning and examination performance, and increase student repetition and dropout, as some students, especially those from lower-income backgrounds, might not be able to resume their studies due to economic or family pressures or lower academic performance due to missing out on classes, the study explained.

The sudden closure of campuses and schools, as a social distancing measure to prevent community transmission, has shifted face-to-face classes to online learning systems. As a result of using distance education, some negative aspects that affected quality education were observed, including the lack of an adequate infrastructure for some students, less effective teacher-student communication and interaction, impossibility of performing practical applications, lack of socialization, lack of learning motivation, and less objective examination with increased possibility of cheating. Meanwhile, internet access, sufficient bandwidth and reliability is still a challenge in many countries, as are frequent power cuts, making teaching and learning less effective. In Mediterranean countries, almost half of households do not have Internet at home. Besides teaching and learning challenges, universities have also been struggling with Student assessments, end-of-year and university entrance exams, the study indicated.

Countries and universities in the region are thus adopting a range of different new approaches. While Tunisian universities are all back to regular on-campus operations with face-to-face teaching, Moroccan universities have continued online-only courses since the first campus closures in March 2020. Algeria postponed the start of the new university year by about one month and opted for a gradual return to in-person classes due to the worsening pandemic situation, the pending completion of some of previous academic year's exams; and transport/affordability problems in the return to university of students from remote areas.

5. Implications & Recommendations

In South-Med countries, the pandemic has challenged the higher education sector in many new and unexpected ways. The coronavirus pandemic poses financial challenges to universities and higher education institutions, as it has affected its missions in teaching, learning, research and community services.

As universities and higher education institutions in the South-Med region still adapt to the 'new normal' while implementing rapid changes to meet changing government regulations and recommendations, they must forge new paths in crisis management. This requires envisaging practical solutions to face the shortage of funding as well as to lay the foundations for a sustainable higher education funding landscape.

In response to the financial challenges facing universities in South-Med countries, they must mobilize their limited resources and still deploy their quadruple mission of teaching and learning, research and scholarship, public service and engagement and act as hubs of innovation and entrepreneurship.

i. The need for a cost-effective business model

The economic crisis resulting from the Covid-19 pandemic has highlighted structural bottlenecks in the way universities have been traditionally funded. Public universities that rely almost exclusively on government budget are vulnerable when fiscal resources are constrained, as is the case today. Private higher education institutions totally dependent on tuition fees are even more vulnerable, and many are likely to close down over the next few years.

Despite the economic impact of COVID-19, some private universities in South-Med countries have increased *tuition fees*, which might cause harmful impact on students' communities. For example, 6 Egypt-based private universities increased their tuitions fees ranging from 19 to 25 percent in faculties of medicine, pharmacy and dentistry, and increased as high as 36 percent for some majors like engineering, according to October 2020 Al-Fanar-Media research^{xxvii}.

Such a decision might lead to the withdrawal of the majority of students especially - from less privileged households - from private universities to public ones causing problems in university excess. However, as tuition fees represent a non-negligible share of budget especially in private universities, in a post-COVID-19 environment, universities must adopt a **"top-down frugal innovation mindset or business model"** (doing more with less while adopting home-grown solutions). This model would require the following pre-requisites:

- a- Both public and private universities should explore **adopting cost-effective blended modes of teaching and learning**, following examples such as of Southern New Hampshire University^{xxviii} in the United States, that has been able to reduce its costs by more than 50% through using different financial models and two education delivery systems, including face-to-face and online-learning to provide more affordable, flexible, and accessible pathways to higher education for students.
- b- Include **risk management** in the strategic planning^{xxix} and daily operations to deal with future health crises including enhancing the capacity of universities to switch rapidly and effectively to online teaching and learning, as well as building financial reserves. Very few universities have learned the lessons of previous crises, such as the SARS epidemic in 2002-2003 or the Ebola epidemic in 2014, and few included risk-management in their strategic planning and daily operations. An exception can

be found in China^{xxx} where universities have made significant contributions to emergency risk management. Such contributions have been made in several areas including alumni resource collection, medical rescue and emergency management, mental health maintenance, control of staff mobility, and innovation in online education models.

- c- Bearing in mind underserved student groups and under-resourced institution types, **funding-allocation mechanisms that are directly linked to the overall performance of universities** at teaching, research and community services levels should be used. This is in line with a recent study^{xxxi} that found that performance-based funding based on only outcomes of retention and graduation has null or modest impacts on institutional outcomes. Learning from the European reaction during the 2008 global financial crisis, South-Med universities should go towards gradually increasing competitive funding. In Estonia for instance, public funding for research is now largely allocated through project-based competitive mechanisms. Other competitive schemes such as excellence initiatives were introduced in Germany and France to support the development of wider institutional strategies.

South-Med **universities must formulate effective strategies for fund generation by re-orienting their programmes** towards stimulating national economic development, towards societal needs and market demands as well as industrial innovation through promoting knowledge transfer, commercial operations and public-private partnerships. Such activities^{xxxii} could include :

- **Launching “virtual exhibitions”** showcasing scientific ideas that could be translated into products and services and establishing public-private universities alliances. For example, the Mohammed VI Polytechnic University in Morocco signed a framework agreement with the Ministry of National Education, Vocational Training, Higher Education and Scientific Research to share its know-how relating to the digitization of educational content.
- **Income generation initiatives such as setting-up paid online consultancies for the industry and private sector**, organizing paid online educational courses and professional training programmes for public and business communities, working with regional and international publishing houses to produce digital and printed books and establishing university-business incubators to support SMEs.
- **Focusing their research agendas on serving evolving needs** during the pandemic and post-pandemic periods, as well as serving as safe havens for fledgling entrepreneurial activities. For example, Tunisia has launched a two-year coronavirus innovative research initiative aimed at helping universities and their associated science, technology and innovation research centres to find a medical solution, and ways to contain the virus. Meanwhile, Egypt's Funding Authority of Science, Technology and Innovation launched an emergency appeal for all researchers to submit anti-coronavirus research projects that cover fields of medicine, pharmacy, medical supplies, public health and information technology. As a result, clinical trials were expected to start on Egypt's first locally developed Covid-19 vaccine (Covi Vax) after obtaining regulatory approval from Egyptian Drug Authority^{xxxiii}. Universities in South-Med countries could join the global coronavirus research race and benefit from the Open COVID Pledge^{xxxiv} an initiative which calls on universities and companies to make their intellectual property freely available for use in combating the COVID-19

pandemic. Meanwhile, Covid-19 emergency packages/measures could be funded from strengthening taxation^{xxxv} of wealth and high incomes.

ii. **Proposed initiatives...call for action**

To face the COVID-19 impact on South-Med universities, the following initiatives can be considered in an attempt for joining forces among higher education institutions in the region.

Setting-up a South-Med countries COVID-19 higher education policy tracker

South Med universities should establish their own virtual COVID-19 tracking systems. The policy tracker system should have COVID-19 modeling tools aimed at helping South-Med countries to evaluate the potential magnitude of COVID-19 in their countries and make decisions on responses to mitigate associated risks which is likely to fill local data and knowledge gaps and enhance research opportunities and capacity at universities. These locally generated data would be beneficiary in many aspects as follows:

- they could be used by South-Med countries' food security researchers, economic consultants, nutrition experts, social scientists, technical and scientific experts, and, health professionals at universities for developing innovative models to detect, project, and combat COVID-19 as well as for preparing mitigation strategies and action plans.
- they would also help universities in conducting research and generate much-needed context-specific data and modeling on various aspects of the COVID-19 pandemic, from transmission patterns to contact tracing and capacities to manage the crisis for more informed public policy responses and interventions. Universities should cooperate with other modeling groups and technical and research partners including the COVID-19 International Modelling Consortium and COVID-19 Multi-Model Comparison Consortium, in order to address questions emerging from South-Med countries, and support preparedness and response plans.

The policy tracker system should provide a selection of practicable strategies to help universities respond appropriately to the pandemic as well as serve as a guide for regional and international education trackers to learn from best-practices. This initiative can be established with the support of philanthropic funding^{xxxvi} and could be placed under the administrative supervision of a regional or international educational organization.

Creating a South-Med countries universities alliance

A universities alliance could be an important stimulating tool for facing the impact of COVID-19 on university education by allowing direct knowledge and technology transfer in order to face the common problems imposed by COVID-19 more efficiently.

The proposed alliance would promote higher education to help achieve sustainable development goals, as regional universities could also set-up a new model for virtual and physical inter-university campuses. This would make it possible to pool their expertise, platforms and resources for integration of sustainable development goals in academic and

professional development and deliver joint curricula or modules covering various sustainability disciplines.

The proposed alliance would help transform higher education sectors in the region through multidisciplinary education, research and entrepreneurship for providing the knowledge, skills, attitudes and values for a new generation of graduates.

Practically, a South-Med countries universities' alliance could be based on setting up a North-South network, including EU countries, where universities pool their resources through a digital platform. This Alliance could be for example hosted under the umbrella of the Union for the Mediterranean with possible financial support from regional donors including ALECSO and ISESCO. The Netherlands-based Association of Arab and European Universities, Ghana-based African universities association and Jordan-based Arab universities association along with the Federation of the Universities of the Islamic World could be part of the cooperation plan.

Creating a Euro-Mediterranean campus foundation

University foundations in developing nations can be alternatives for generating more funding for research and training, encouraging innovation, improving student life, increasing access to higher education, enhancing the host university's international influence through students and teacher-researcher mobility, the reception and support of foreign students or researchers, and the granting of scholarships.

Several cases of university foundations exist in Africa, such as the Ashesi University Foundation in Ghana, the University of the Witwatersrand Foundation in South Africa, University of Cape Town's US and UK funds, the African Academy of Science Fund in Kenya, and Makerere University Endowment Fund in Uganda. Francophone universities are also experimenting with these fundraising platforms, as is the case with Fondation de l'Université d'Abomey-Calavi in Benin or Fondation Université Cheikh Anta Diop in Senegal.

There is a clear need to examine the creation and development of university foundations in universities, as well as to analyse new opportunities and challenges associated with this "new philanthropic model". By acting through a foundation, a campus in a South-Med country could receive, spend, and invest funds directly, often bypassing university governance procedures and the restrictions that would normally apply to state appropriations and to state procurement. Thus, South-Med universities may want to start setting-up affiliated nonprofit foundations.

This is the right time for philanthropy. As seen in the region, Morocco^{xxxvii} has created an emergency fund of around US\$ 2.5 billion financed by the state together with donations from businesses and individuals. Tunisia^{xxxviii} has also created a voluntary fund dedicated to fighting the coronavirus outbreak and reducing its economic repercussions. The Algerian Government^{xxxix} has opened different accounts dedicated to receiving donations from Algerian citizens willing to contribute to the solidarity movement initiated in response to the spread of Covid.

These national philanthropic gestures, and the expression of sacrifice and generosity which were positively received by society and the government, could be directed towards forming campus foundations in each of the South-Med countries. They could be the core for launching a ground-breaking initiative to establish a *Euro-Mediterranean campus foundation* - an association of universities from all Mediterranean countries.

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This Policy Brief is produced as part of the series of Policy Briefs on « Responding to the Challenges of COVID-19 in the Mediterranean » that is undertaken in partnership between FEMISE and the Center for Mediterranean Integration (CMI). The views expressed in this Brief do not reflect the views of CMI or FEMISE. The contents have not been subjected to verification by CMI or FEMISE and their publication does not reflect ownership by CMI or FEMISE.

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